and Power Utilities only against advance payments. This scheme, which is better known as Cash and Carry Scheme for power sector, has been implemented by CIL with effect from 1-10-91. Some State Electricity Boards have requested for quick settlement of their claims towards grade slippages, short receipts etc. Coal India Ltd. have been advised to ensure settlement of such claims as early as possible.

Output of raw coal

1222. SHRI KAMAL MORARKA: Will the Minister of COAL be pleased to state:

(a) what is the output of raw coal per manshift in India today and how it compares during the end of Sixth and Seventh Five Year Plans;

(b) in what manner it compares with the developed countries; and

(c) the reasons for the low output per Manshift and the steps taken to improve the productivity in the Coalfild in India?

THE DEPUTY MINISTER IN THE MINISTRY OF COAL (SHRI S. B. NYAMAGOUDA): (a) The information is given below:—

Output per manshift (tonnes)

Year	Coal India Ltd.	Singareni Collieries Company Ltd.
1985-86 (end of VIth plan)	0.87	0.88
1989-90 (end of VIIth plan)	1.21	0.98
1991-92 (April-January,92)	1.31	0.92(provisional)

(b) Available productivity figures for 1990 of some coal producing countries are as under:—

	Underground OMS (tonnes)
Austrailia	10.03
France	3.04
Germany	4.32
Poland	3.80
U.K.	2.85
USA	7.49

(c) Some of the important reasons for low output per manshift in Indian coal mines are as under:—

(i) Majority of the underground mines are worked manually.

(ii) Many underground mines are having geo-mining problems like steep and multiple seams, occurrance of fires and water logged and workings in adjoining areas, built up surface structures which need protection by sand stowing etc. requiring employment of sizeable workforce for dealing with such unproductive activities.

(iii) High rate of absenteeism.

(iv) Coal companies are required to provide supporting services for workshops, warehouses and also municipal services like hospitals, water supply, colony maintenance etc. through departmental workforce, which gets added to the total manpower for computation of output permanshift lowering the overall productivity figure.

Some of the major steps being taken to improve productivity in Indian coal mines are as follows:—

(i) Improved manpower planning including redeployment of surplus workers.

(ii) Stricter control on increase in manpower.

(iii) Deployment of higher capacity equipment like draglines, shovels, dumbers and drills in opencast mines and roof bolting machines, continuous miners, powered support longwall systems, multislicing, blasting galery method etc. in underground mines.

(iv) Improvement in the availability and utilisation of equipment by providing adequate workshop support, improved management of spares and timely rehabilitation of equipment.

Jhajhra Project of Eastern Colleries Limited

1223. SHRI SUNIL BASU RAY : Will the Minister of COAL be pleased to state:

(a) whether it is a fact that Jhajhra Project of Eastern Colleries Limited near Durgapur, build up with Soviet aid is facing crisis of extinction; and

(b) if so, what remedial action Government have taken in thiss regard ?

THE DEPUTY MINISTER IN THE MINISTRY OF COAL (SHRI S. B. NYAMAGOUDA) : (a) The recent events in the erstwhile USSR have created certain uncertainities in the supply of equipment as well as spare parts for Soviet manufactured equipment. However, it is not likely that tnis will have serious adverse effect on the implementation of this project, as negotiations would be held with successor Governments.

(b) The following intermediate steps are being taken to ensure the smooth implementation of this project :—

(i) Major assemblies/sub-assemblies of Soviet manufactured equipment are being planned to be replaced with indigenously manufactured assemblies.

(ii) Indigenisation of spare parts to the extent possible is being undertaken.

(iii) Direct contacts with Soviet Manufacturers are being made o